

THE IDENTITY OF *EUCOMIS NANA* (BURM. F.) L'HÉRIT.

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ABSTRACT

An older, yet valid name for *Eucomis nana* (Burm. f.) L'Hérit. is proposed. The correct name for this taxon which is common in the South Western Cape should be *Eucomis regia* (L.) L'Hérit.

UITTREKSEL

DIE IDENTITEIT VAN *EUCOMIS NANA* (BURM. F.) L'HÉRIT.

'n Ouer geldige naam word vir *Eucomis nana* (Burm. f.) L'Hérit. voorgestel. Hierdie takson, wat algemeen in die Suidwestelike Kaap voorkom, behoort as *Eucomis regia* (L.) L'Hérit. bekend te staan.

Although the specific epithet "regia" was the first to be applied to the present day genus *Eucomis* there was, to date, no clarity as to the taxon to which it belonged. Several authors have applied this epithet to different species of the same genus and it has thus become necessary to clarify the situation.

1. Pre-Linnaean History

The only two references prior to 1753 to the genus *Eucomis* L'Hérit. are those of Petiver (1702-1709) and Dillenius (1732). Some authors, such as L'Héritier (1788) and Aiton (1789), applied the phrase-description of Petiver to *Eucomis nana* sensu Aiton but Ker Gawler (1812) on the other hand is of the opinion that this was not reliable since the phrase-name "Orchidea capensis, tulipae flora rosaceo" by Petiver was based only on a figure of a spike.

The more reliable reference prior to 1753 to a plant which undoubtedly falls within the present day genus *Eucomis* was that of Dillenius (1732). Since all the characteristics of the plant which appeared in the description and figure agreed with the later described *Eucomis nana* (Burm. f.) L'Hérit., it can be concluded that Dillenius' "Corona Regalis Lili folio, crenato" is as far as is known the earliest description of *Eucomis nana* (Burm. f.) L'Hérit.

2. Post-Linnaean History

In the first edition of *Species Plantarum*, Linnaeus (1753) gave the following description of *Fritillaria regia*: "racemo comoso inferne nudo, foliis crenatis" and regards the description and illustrations of Dillenius (1732) to be of the

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same plant. According to Van Houtte (1877) Linnaeus did not see the plant itself, but relied solely on the description and sketches of Dillenius—as the choice of the specific epithet shows. This would also explain Linnaeus' erroneous use of a generic name, *Fritillaria*, which had already been applied to another genus.

In 1768 a second type, namely *Fritillaria nana* (“racemo comoso foliis bifariis, amplexicaulibus, lanceolatis”) was described by Burman which represented one and the same taxon as *F. regia* L. Burman, however, does not quote the Dillenius plate for this species and on the contrary he enumerates *F. regia*. Since Burman's description is inadequate and erroneous (bifarious and amplexicaul leaves never existed in *Eucomis*) and is furthermore without a type, we cannot be sure that it is even a description of a *Eucomis* sp. Miller's (1768) description of *Fritillaria regia* L. deserves mentioning since it lead, without any doubt, to the correct identification of the species under the correct specific epithet *regia* and not *nana*.

During 1771 Linnaeus gave recognition to the name *F. nana* Burm. f. by repeating the description given by Burman (1768) in *Mantissa Plantarum*.

The genus *Fritillaria*, as constituted by Linnaeus in 1753, contained a number of divergent species and L'Héritier (1788) then separated the South African taxa under *Eucomis*. Within the new genus he recognizes three taxa, viz. *E. regia* (L.) L'Hérit., *E. nana* (Burm. f.) L'Hérit. and *E. punctata* L'Hérit.

From the description of *E. regia* (L.) L'Hérit. it is clear that he applied this name incorrectly to still another taxon, namely *Fritillaria autumnalis* Miller, since he also confused the characteristics of two different taxa, viz. *Fritillaria regia* L. and *F. longifolia* Hill. This, then, was the source of most of the confusion among later authors, such as Aiton (1789, 1811), Don (1796), Willdenow (1799) and Baker (1873). Aiton (1789), for example, circumscribed *E. nana* sensu Aiton quite correctly and also named it the dwarf *Eucomis*, but did not give a popular name to *E. regia*, since the previous circumscriptions were not clearly defined. The same applied to later authors in that they also showed a measure of clarity in connection with the identity of *E. nana* sensu Ait., but were still uncertain about the identity of *E. regia*. Baker (1873) even went so far as to use the name *E. regia* for the previously described *E. clavata* Baker.

A particularly discerning contribution to the identity of *E. nana* sensu Ait., *E. regia* sensu Ait., and *E. regia* (L.) L'Hérit. was published by Ker Gawler in 1812 in Curtis's Botanical Magazine. In his dissertation on *E. nana* sensu Ait. he regarded *Fritillaria regia* L. and “Corona Regalis Lili folio, crenato” of Dillenius (1732) as being synonymous. It is both remarkable and interesting that Ker Gawler (1812) considered “Corona Regalis Lili folio, crenato” to be synonymous with *E. nana* sensu Ait. and not with *E. regia* (L.) L'Hérit. or *E. regia* sensu Ait. as did previous authors, such as L'Héritier (1788), Lamarck

(1789), Willdenow (1799), Redouté (1807) and Aiton (1811). Even though Ker Gawler was the first to perceive and record this synonymy, he did not, however, confirm it since he gives no facts and still uses the name "nana" for his plate and not the older name "regia".

During 1967 Obermeyer corrected the author for the species *E. nana* as (Burm. f.) L'Hérit. Previously Aiton was assumed to be the author. Even though the author was now correct the epithet *nana* cannot be recognized, since the same species had previously been named *Fritillaria regia* L. and the sheet at Geneva, thought to have been the Burman type, proved to be a Thunberg collection (1774–75) and therefore cannot be the type.

CONCLUSION

1. Although L'Héritier erred in applying Linnaeus' name to another species (now recognized as *E. autumnalis* (Mill.) Chittenden) the correct name for the species should be *Eucomis regia* (L.) L'Hérit.

Basionym: *Fritillaria regia* L.

Type: tab. 92 & 93, fig. 109 & 110 in Dill. Hort. Elth. (1732).

2. The description of *Fritillaria nana* Burm. f. is too short to establish the species. As long as no type is found it must be placed under uncertain species.

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REFERENCES

- AITON, W. T., 1789. *Hortus Kewensis*, vol. 1, p. 432–433. London: George Nicol.
- AITON, W. T., 1811. *Hortus Kewensis*, vol. 2 ed. 2, p. 245–246. London: Longman.
- BAKER, J. G., 1873. *Eucomis* L'Hérit. *J. Linn. Soc.* **13**: 224–226.
- BURMAN, N. L., 1768. *Flora Indica*. Series Zoophytorum Indicorum, nec non Prodomus Florae Capensis, p. 9. Leyden.
- DILLENIUS, J. J., 1732. *Hortus Elthamensis*, p. 109–111 t. 92 & 93 fig. 109 & 110. London: Sumptibus Auctoris.
- DON, J., 1796. *Hortus Cantabrigiensis*, ed. 2, p. 40. Cambridge.
- GAWLER, K. 1812. *Eucomis nana*. *Bot. Mag.* **36**: t. 1495.
- LAMARCK, J. B. A. P. M. 1789. *Dictionnaire Encyclopedique De Botanique*, vol. 1, p. 382. Paris.
- L'HÉRITIER, C. L., 1788. *Sertum Anglicum*, p. 17–18. Paris.
- LINNAEUS, C., 1753. *Species Plantarum*, vol. 1, p. 303. London: Ray Society.
- LINNAEUS, C., 1762–64. *Species Plantarum*, vol. 1, ed. 2, p. 435. Stockholm: Salvius.
- LINNAEUS, C., 1771. *Mantissa Plantarum*, p. 223. Weinheim: Wheldon and Wesley.
- MILLER, P., 1769. *The Gardeners Dictionary*, ed. 8 no. 9 & 10. London.